Docket No.: TI-29503



Abstract of the Disclosure

A system and method of data communication uses variable transmit antenna delays based on uplink measurements for the time division duplex (TDD) mode of WCDMA communication. The signals for each channel are delayed at baseband, so different delays can be used for each channel. The delay between each antenna is chosen so that the strongest paths do not overlap in order to implement full transmit antenna diversity. The transmitted signals are detected at a mobile terminal via a joint detector to eliminate noise from other mobile terminals within the cell.